EXECUTIVE SUMMARY

F-3

Fish Screen Feasibility Study (Phase I)

Applicant
Boeger Family Farms

Project Description & Primary Biological/Ecological Objectives:

Anadromous fish use the mainstem Sacramento River as the thorough-fare between their spawning grounds in the upper reaches of the river to the Pacific Ocean where they grow to full-adult size. Two years later, as full-size adults, they return to the river to spawn and die. Species such as steelhead and chinook salmon spawn in gravel beds near Redding and outmigrate down the Sacramento River as juveniles and smolts. During their period of outmigration, hundreds of agricultural farmers are diverting water from unscreened or poorly screened diversions. Unscreened diversions have been suspected of being a significant source of mortality for steelhead and chinook salmon.

Boeger Family Farms recognizes the importance of screening diversions and proposes to install fish screens on its pumping plant on the Sacramento River near Colusa. The fish screen would reduce entrainment of priority species at the Boeger Family Farms pumping plant; priority species that include steelhead and various chinook salmon runs, including winter-run, spring-run, and late-fall run.

Approach/Tasks/Schedule:

The completion of the proposed project would involve two phases. The first phase of the project is a feasibility report consisting of the following studies:

Technical Study	-	Nov. 1997 to Jan. 1998
Biological Study	-	Nov. 1997 to Mar. 1998

Fish screen alternatives would be developed, from which a preferred alternative would be chosen for Phase II, construction. Phase II consists of the following tasks:

Engineering & Design	-	Jan. 1998 to Apr. 1998
Biological Consultation	-	Jan. 1998 to Apr. 1998
Regulatory Permits & Consultation	-	Jan. 1998 to Apr. 1998
Construction	-	Apr. 1998
Post-Project Monitoring	-	Apr. 1998 to Nov. 2001
Maintenance	-	Aug. 1998 to Nov. 2001

Justification:

The proposed project addresses one of CALFED's stressor categories, benefits multiple species, is consistent with CALFED's long-term objectives, and has no-third party or redirected impacts.

4a

E-002318

Budget Costs:

Funding is requested at this time for the Phase I-Feasibility Study as follows:

Technical Study	-	$8000
Biological Study	-	$19000
Total Project Cost		$27000

Phase II -- Construction funding would be requested at later time should Boeger Family Farms proceed with construction. It is estimated that $175,000 would be needed to complete phase two, based on past experience at similar size diversions. Funding sources would be CALFED, CVPIA Unscreened Diversion Program and other funding possibilities.

Third Party Impacts:

There are no anticipated third party impacts associated with the proposed project.

Applicant Qualifications:

This proposal is submitted by Murray, Burns and Kienlen, Consulting Civil Engineers of Sacramento, California, on behalf of Boeger Family Farms. MBK has been retained to secure CALFED funding, prepare technical and biological studies, engineering design, post-project monitoring and procurement of any subcontracts.

Murray, Burns and Kienlen (MBK) has provided consulting services to Boeger Family Farms, and its predecessor for over 20 years. MBK has been involved in over eight fish screen projects on the Sacramento River and in the Sacramento/San Joaquin Delta. Their experience in screening facilities and familiarity with the site make them uniquely qualified to manage this project.

Monitoring and Data Evaluation

Should the fish screen be constructed, the project would be monitored for biological effectiveness and mechanical performance of the fish screen. A technical report would be prepared after each irrigation season to document mechanical performance of the fish screen and cleaning system. Biological monitoring would focus on both hydraulic and biological criteria

If the proposed project proceeds to phase two, the final design and specifications of the fish screen would incorporate advice from Department of Fish & Game, and National Marine Fisheries Service for expedient permit approval. Permits or approvals will be obtained from the Corps of Engineers , Department of Fish & Game Streambed Alteration Agreement, and the Central Valley Regional Water Quality Control Board. Cost share by Boeger Family Farms would be means of long-term operation and maintenance of the fish screen and in-kind services during post-project monitoring.